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ANNOUNCING THE GREAT FRAME TILT JUDGING CONTEST,(U)
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20. ABSTRACT (Continue on reverse side if necessary and identify by block number)

This article uses a novel approach, a contest, to call attention to the questionable validity of the rod-and-frame test, a measure of the personality dimension of field-dependence-independence.

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Announcing the Great Frame-Tilt Judging Contest! [1]

Bernard J. Fine

U.S. Army Research Institute of Environmental Medicine, Natick, Massachusetts [2]

Insert Figure 1 here

Contest rules

1. Look at the tilted square in Figure 1 and decide whether it is tilted to the right or to the left;

2. Ask 19 of your friends and acquaintances to do the same. Make sure that you record their responses (ask: "In which direction is this square tilted ?");

3. Read Fine and Danforth (1975);

4. Read the "methods" sections of these representative articles: Sigman, Goodenough and Flannagan, 1979, 1978; Bergman, 1979; Rusch and Lis, 1977; Ehrlichman, 1976; or any of your own choosing that deal with the rod-and-frame;

5. Write a 500 word essay on the following topic:

"Why, in studies in which the rod-and-frame test is used to measure field-dependence, the investigator always defines the direction of the tilt of the frame, rather than having the S do so."

Submission of entries

Send tallies of the judgments of direction of tilt and your essay to the author at the above address. Contest closes midnight, December 31, 1980.

Special qualifying rules

In order for your entry to be eligible for the Grand Prize, both of the following criteria must be met:

1. Only entries in which at least 75% (15 of 20) of the tilt judgments of Figure 1 were "left" are acceptable (honor system); and

2. Each entry must be accompanied by one reference to a published article (except Fine & Danforth) in which the rod-and-frame test was used to measure field-dependence and in which the direction of frame tilt was defined by the observer rather than by the experimenter.

Grand Prize

Publication of the winning essay as a Note in Perceptual and Motor Skills, subject to its meeting the scientific and editorial standards of the journal.

Consolation prize

Whether or not you enter, try the following perceptual exercise which can be quite rewarding: Fixate the tilted square shown above for one minute. As you are fixating it, does it always appear to be tilted in the same direction ? Can you "make" it change directions at will ? Ask your friends to do it. What happens to their perceptions of tilt ? How does this relate to the rod-and-frame task ? In which direction is the square tilted ?

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References

Bergman, H. Reliability of the Karolinska Rod-and-Frame Test. Perceptual and Motor Skills, 1979, 49, 355-358.

Ehrlichman, H. Rod and frame in immediate perception. Perceptual and Motor Skills, 1976, 43, 1015-1019.

Fine, B. J. & Danforth, A. V. Field-dependence, extraversion and perception of the vertical: empirical and theoretical perspectives of the rod-and-frame test. Perceptual and Motor Skills, 1975, 40, 683-693.

Rusch, R. & Lis, D. Reliability and trend for field independence as measured by the portable rod-and-frame. Perceptual and Motor Skills, 1977, 44, 55-61.

Sigman, E., Goodenough, D. R. & Flannagan, M. Instructions, illusory self-tilt and the rod-and-frame test. Quarterly Journal of Experimental Psychology, 1979, 31, 155-165.

Sigman, E., Goodenough, D. R. & Flannagan, M. Subjective estimates of body tilt and the rod-and-frame test. Perceptual and Motor Skills, 1978, 47, 1051-1056.

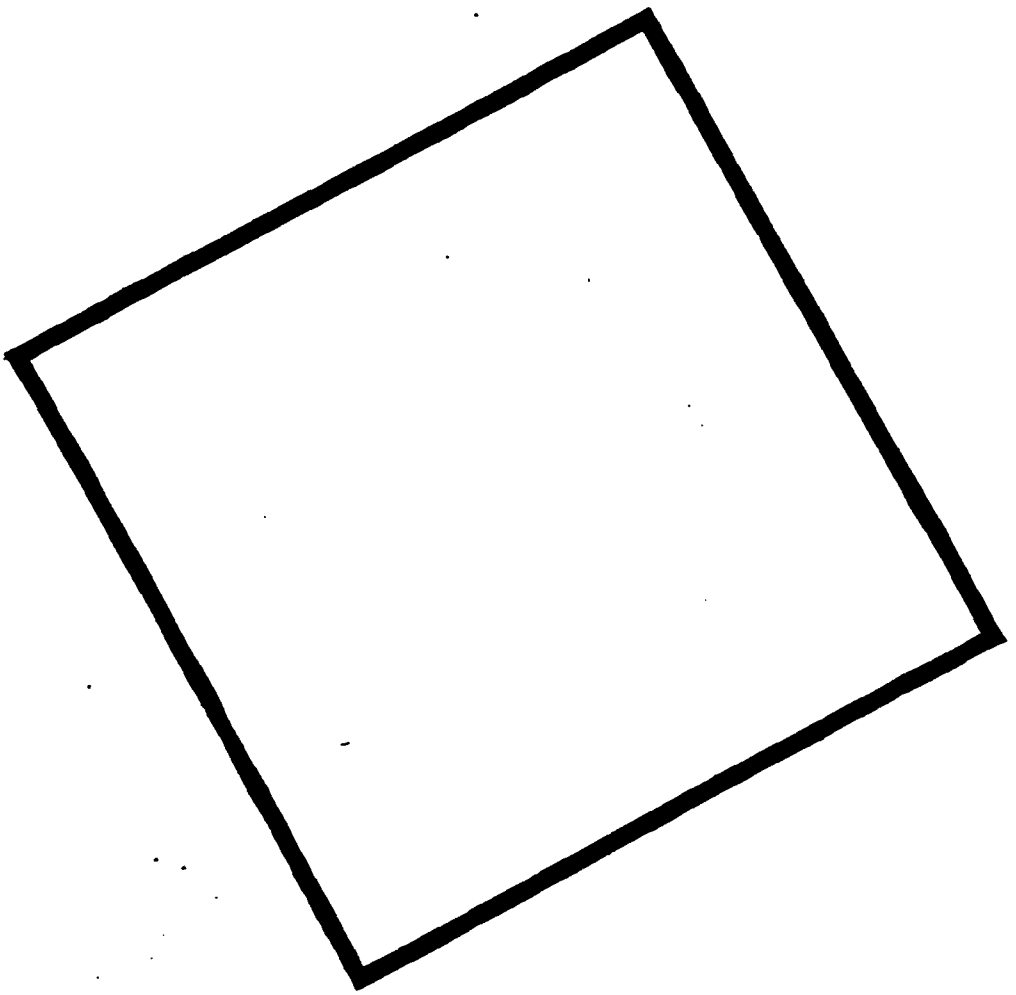
Footnotes

1. We are not being facetious. By using this format we are attempting to draw attention to the fact that in every article that we can find in which the rod-and-frame has been used, the square shown in Figure 1 has been defined arbitrarily by the investigator as being tilted to the "left" (28°). We don't believe it (see Fine & Danforth, 1975). We have determined empirically that it is seen as tilted left 28° or right 62°, sometimes one way and sometimes the other by the same observer. The rod-and-frame may be an excellent measure of something, but it simply is not being used in a way that is consistent with the theory behind it. We are curious to find out why this misuse persists and why our attempt to point out the misuse remains unanswered AND, in most cases, is not even acknowledged.

2. This paper does not reflect the views of the Department of Defense or the Department of the Army.

Fine

Figure 1



1. The views, opinions, and/or findings contained in this report are those of the author(s) and should not be construed as an official Department of the Army position, policy, or decision, unless so designated by other official documentation.

2. Human subjects participated in these studies after giving their free and informed voluntary consent. Investigators adhered to AR 70-25 and USAMRDC Regulation 70-25 on Use of Volunteers in Research.